

TSMC-00-511

January 5, 2004

To: Commissioner for Patents  
P.O.Box 1450  
Alexandria, VA 22313-1450

Fr: George O. Saile, Reg. No. 19,572  
28 Davis Avenue  
Poughkeepsie, N.Y. 12603

Subject: | Serial No. 10/689,430 10/20/03 |  
Hong-Miao Chen et al.  
CONTAMINANT PARTICLE REMOVAL BY  
OPTICAL TWEEZERS  
| \_\_\_\_\_ |

INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation  
In An Application.

The following Patents and/or Publications are submitted to  
comply with the duty of disclosure under CFR 1.97-1.99 and  
37 CFR 1.56.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being  
deposited with the United States Postal Service as first class  
mail in an envelope addressed to: Commissioner for Patents,  
P.O. Box 1450, Alexandria, VA 22313-1450, on January 27, 2004.

Stephen B. Ackerman, Reg.# 37761

Signature/Date

SB Ackerman 1/27/04

U.S. Patent 6,055,106 to Grier et al., "Apparatus for Applying Optical Gradient Forces," describes an apparatus for manipulating small dielectric particles.

U.S. Patent 5,953,166 to Shikano, "Laser Trapping Apparatus," discloses a laser trapping apparatus.

U.S. Patent 5,689,109 to Schutze, "Apparatus and Method for the Manipulation, Processing and Observation of Small Particles, in Particular Biological Particles," discloses an apparatus and method for the manipulation, processing and observation of small particles.

U.S. Patent 5,620,857 to Weetall et al., "Optical Trap for Detection and Quantitation of Subzeptomolar Quantities of Analytes," discusses using tightly focused laser beams as optical tweezers.

U.S. Patent 5,245,466 to Burns et al., "Optical Matter," discloses creating arrays using light beams coupled to microscopic polarizable matter.

U.S. Patent 5,079,169 to Chu et al., "Method for Optically Manipulating Polymer Filaments," discloses a method for optically manipulating polymer filaments.

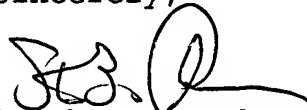
U.S. Patent 4,893,886 to Ashkin et al., "Non-Destructive Optical Trap for Biological Particles and Method of Doing Same," describes a non-destructive optical trap for biological particles.

U.S. Patent 5,512,745 to Finer et al., "Optical Trap System and Method," discloses an optical trap system.

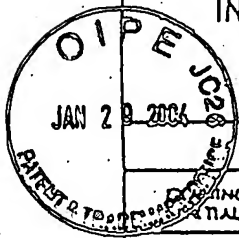
The following two U.S. Patents discloses optical trap related patents:

- 1) U.S. Patent 3,808,550 to Ashkin, "Apparatuses for Trapping and Accelerating Neutral Particles."
- 2) U.S. Patent 6,139,831 to Shivashankar et al., "Apparatus and Method for Immobilizing Molecules Onto a Substrate."

Sincerely,



Stephen B. Ackerman,  
Reg. No. 37761



Form PTO-1449

INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION  
(Use several sheets if necessary)

Doc No. (Cpains)  
TSMC-00-511

Applicant  
Hong-Miao Chen et al.

Filing Date  
10/26/03

Application Number  
10/689,430

Group Art Unit

## U. S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILED DATE IF APPROPRIATE
	6055106	4/25/00	Grier et al.	359	566	2/3/98
	5953166	9/14/99	Shikama	359	837	11/21/97
	5689109	11/18/97	Schutze	250	251	1/13/94
	5620857	4/15/97	Weetall et al.	435	7.1	6/7/95
	5245466	9/14/93	Burns et al.	359	296	10/8/91
	5079169	1/7/92	Chu et al.	436	172	5/22/90
	4893886	1/16/90	Ashkin et al.	350	1.1	9/17/87
	5512745	4/30/96	Finer et al.	250	251	3/9/94
	3808550	4/30/74	Ashkin	331	94.5	1/24/72
	6139831	10/31/00	Shivashankar et al.	424	82.05	5/28/98

## FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
					YES	NO

## OTHER DOCUMENTS (Including Author, Title, Date, Portmox Pages, Etc.)


EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.